Marshmallow Catapult

Control Experiment

\*In our explanation… talk about the experiment being on the floor.

L – shaped piece of paper with a degrees measured all ready labeled on the it

\*the top that goes on the

Prepare a plastic baggie with

\*Spoon

\*marshmallow

\*block of wood

\*tape

\* Paper with the measurements labeled for primary and protractors for intermediate

\* measurement tools and safety goggles provided by teacher

1. Tape one **marshmallow** in center of the spoon to serve as a ledge to hold the **marshmallow** that will be launched. \*\*\*Do we need glue dots?

2. Tape the spoon so that it measures up with the bottom of the block. The handle end of the spoon should touch the floor. Put a piece of tape on the floor to line up the edge of the block as a “starting line” for each trial.

3. Set your catapult marshmallow on top of the ledge you created in step 1.

4. Have your partner hold your measurement tool on top of the block next to your spoon. Pull it back to 10 o.

5. Place a **marshmallow** in the spoon, on top of the taped **marshmallow**. Pull back lightly, and let go. (Take care not to pull too hard and break the delicate utensil.) It may be easiest to have one person hold the **catapult** to the protractor at the proper angle and another person launch the **marshmallow**.

6. Measure and record the distance in centimeters from the **catapult** to where the **marshmallow** lands. Repeat this trial 2 more times and calculate the average.

7. Repeat step 4 for each angle.

Inquiry piece  
Now that we did the experiment, change one of the variables to try to make it fly farther.

Other colors/size of marshmallows

Spoons/popsicle sticks/etc…